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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/781,287

02/18/2004

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EXAMINER

BROOME, SAID A

ART UNIT

PAPER NUMBER

2628

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/781,287	Applicant(s) MASAKI, HIROYUKI	
	Examiner Said Broome	Art Unit 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/18/06 has been entered.

Response to Amendment

1. This office action is in response to an amendment filed 12/18/2006.
2. Claims 1, 2, 8, 9, 15, 17 and 19 have been amended by the applicant.
3. Claims 3-7, 10-14, 16, 18 and 20 are original.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art at the time of invention to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 7-9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura et al.(hereinafter "Nishimura", US Patent 3,756,011) in view of Kim (US Patent 6,661,428).

Regarding claims 1 and 8, Nishimura teaches a portable electronic apparatus in column 2 lines 14-16, as recited in the preamble. Nishimura also teaches a display means for displaying a plurality of display segments in column 3 lines 14-19, and also teaches indicating time in a display mode in column 3 lines 62-63, as shown in Figure 3. Nishimura also teaches a manipulation means for selecting any one of the display segments displayed by the display means in column 6 lines 3-6. Nishimura teaches selecting a displayed time segment in which the time indicated in the time display mode is corrected in column 1 lines 36-41. However, Nishimura fails to teach a display brightness control means during the time correction mode. Kim teaches a display brightness control means for controlling the display means so that the display segment selected by the manipulation means has a display brightness higher than that of the other display segments displayed by the display means in column 2 lines 55-56 and 62-65, where it is described that the luminance or brightness of the display is controlled where data lines of the display are selectively displayed brighter than the other displayed segments as illustrated in Figure 13. Therefore it would have been obvious to modify the light emitting display segments that are each selected for modification, as taught by Nishimura in column 6 lines 3-6, with the selective modification of the brightness of display segments on a light emitting display, as taught by Kim in column 1 lines 31-35 and in column 2 lines 62-65, because it would enable brightness control during a time correction or modification to digits displayed on a light emitting display. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Nishimura with Kim because this combination would provide the selective manipulation of display elements in which the selected element would be

Art Unit: 2628

brighter than the other segments thereby conserving energy otherwise necessary to brighten all the elements in the display.

Regarding claims 2 and 9, Nishimura fails to teach the limitations. Kim teaches a time counting means for counting an elapsed time period in column 2 lines 25-26, where it is described that a time period of luminance is associated with a particular display segment, therefore a counting means is executed to count the time elapsed during the period. Kim also teaches that in response to the selection of a display segment by a manipulation means the display brightness control means controls the display means to increase the brightness of the selected display segment to a first predetermined value in column 7 lines 3-8 where it is described that a display segment is selected to be displayed brighter to a predetermined value, as illustrated in Figure 12 as “bright”. Kim also teaches that when the time counting means has counted a predetermined elapsed time period, the display brightness control means controls the display means to decrease the brightness of the selected display segment to a second predetermined value lower than the first predetermined value, as described in column 6 lines 51-54 and 62-64, where it is described that a display segment has a time period associated with it to be displayed brighter than the other, therefore after the time period has expired the segment is displayed at a lower luminance as illustrated in Figure 13 as “normal”. Therefore it would have been obvious to modify the light emitting display segments that are each selected for modification, as taught by Nishimura in column 6 lines 3-6, with the modification of the level of brightness associated with the display segments over an elapsed period of time as displayed on a light emitting display, as taught by Kim in column 1 lines 31-35 and in column 6 lines 51-54 – 62-64, because it would enable brightness control during a time correction or modification to the

digits displayed on a light emitting display. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Nishimura and Kim because this combination would provide a means to conserve energy by counting a predetermined time period in that when the time period has been reached, the brightness of the display is decreased.

Regarding claims 7 and 14, Nishimura teaches a display means that comprises a self-luminous-type display device in column 3 lines 19-21.

Claims 5, 6, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura in view of Kim, in further view of Ogawa (US Patent 6,597,339) and in further view of Lee (US Patent 6,157,169).

Regarding claims 5, 6, 10 and 11, Nishimura and Kim fail to teach the limitations. Ogawa teaches a display brightness control means for controlling the display means to decrease the display brightness time indicated by the indicator in accordance with a time counted by the time counting means in column 3 lines 59-67 and column 4 lines 1-8, where it is described that the predetermined elapsed period of time indicated by the CPU is sent directly to a display device, as illustrated in Figure 1. Ogawa also teaches in column 3 lines 59-67 and column 4 lines 1-8, the CPU sending the period of elapsed time and data that would enable the user to view and modify the level of luminance or brightness of the display. However, Ogawa fails to teach displaying an indicator that displays a time counted by the time counting means. Lee teaches a time indicator that displays a time counted by a time counting means in column 9 lines 46-49, and it is also illustrated in Figure 11. Therefore the elapsed time period determined by the CPU timer 101 in Figure 1 of Ogawa that is sent to the display device 28 illustrated in Figure 1, would

Art Unit: 2628

be available for one of ordinary skill in the art to enable the determined elapsed time period to be displayed to the user as illustrated by Lee in Figure 11. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Nishimura, Kim, Ogawa and Lee because this combination would provide a means to conserve energy by counting a predetermined time period in that when the time period has been reached, the predetermined elapsed time would be displayed and the brightness of the display would be decreased in response to the determined time period.

Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura in view of Kim, in further view of Decker (US Patent 5,285,430).

Regarding claims 3 and 12, Nishimura fails to teach the limitations. Kim teaches that during an elapsed time period, as described in column 2 lines 49-50 and column 6 lines 38-39, the display brightness control means controls the display means to decrease a lit time ratio of the selected display segment, as described in column 3 lines 1-9. However, Nishimura and Kim fail to teach a display brightness control means to cause the display segment selected by the manipulation means to blink while displayed. Decker teaches controlling the display to cause the display segment selected by a manipulation means to blink in column 3 lines 31-35.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Nishimura, Kim and Decker because this combination would provide selection of display segments that blink to indicate chosen segments and to decrease in brightness over an elapsed time period, thereby conserving energy.

Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura in view of Kim, in further view of Nakagiri (US Patent 4,513,282).

Regarding claims 4 and 13, Nishimura and Kim fail to teach the limitations. Nakagiri teaches a selection control means for selectively supplying one of the display segments as a first display segment having a first predetermined size, as described in lines 1-13 of the abstract, and another of the display segments as a second display segment having a second predetermined size smaller than the first predetermined size, as described in column 5 lines 25-30, where it is described that display segments may be individually selected and the size of each of those segments contain a predetermined size even and are modified, as described in column 12 lines 57-60, column 1 lines 64-67 and column 2 lines 1-2. Nakagiri also illustrates a display means to display the display segment selected as the first display segment and a display means to display the second display segment as one of the display segments other than the display segment selected by the manipulation means, in Figure 15 and 16 respectively. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Nishimura, Kim and Nakagiri because this combination would provide selectable display segments that may be altered in size for display, which improves the visibility of display segments of interest during manipulation.

Claims 15, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura in view of Nakagiri (US Patent 4,513,282).

Regarding claim 15, Nishimura teaches all the limitations except a control means for controlling the display so that the display segment selected by the selecting means has a font

larger than that of the other display segments. Nishimura teaches a portable electronic apparatus in column 2 lines 14-16, as recited in the preamble. Nishimura also teaches a display means for displaying a plurality of display segments in column 3 lines 14-19, and also teaches indicating time in a display mode in column 3 lines 62-63, as shown in Figure 3. Nishimura also teaches a selection means for selecting one of the display segments of the display in the time display mode for modification of the selected display segment in a time correction mode in which the time indicated in the time display mode is corrected in column 6 lines 3-6 and in column 1 lines 36-41. Again, Nishimura fails to teach a control means for controlling the display so that the display segment selected by the selecting means has a font larger than that of the other display segments. Nakagiri teaches a control means for selectively supplying one of the display segments as a first display segment having a first size, as described in lines 1-13 of the abstract, and it is also described that the size of the display segments may be individually selected, as described in column 1 lines 64-67 and column 2 lines 1-2, and modified, as described in column 12 lines 57-60. Nakagiri also teaches selecting a display segment, in column 12 lines 37-41 (“...any particular display segment may be selected for excitation as required, to be used in forming a numeral or character, or for providing an indicating marker to designate a numeral or to connect a pair of numerals...”), in which the size of the segment may be adjusted to a different size in column 1 lines 54-64 (“...display device for displaying characters and numerals...with the advantage of flexibility in displaying various numerals and characters and of changing the size and position of these...”) and in column 2 lines 1-20 (“These basic segment units can be individually excited...the size of a numeral or character can be altered freely, as desired, by increasing the number of segments used to form it. In addition, various sizes of numerals or

Art Unit: 2628

characters...”), during a time correction mode as described in column 8 lines 38-52 and as shown in Figure 15. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Nishimura and Nakagiri because this combination would provide the selective manipulation of display segments in which one segment would be larger than the other segments, which improves the visibility of the display segments and conserves energy.

Regarding claim 16, Nishimura teaches a display means that comprises a self-luminous-type display device in column 3 lines 19-21.

Regarding claim 18, Nishimura teaches a portable electronic apparatus that comprises a timepiece in Figure column 2 lines 19-21 and is illustrated in Figure 1. Nishimura also teaches display segments that comprise time display segments for displaying time in column 3 lines 1-4, and is also illustrated in Figure 1 as elements 30, 32, 34 and 36.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura in view of Nakagiri, in further view of Kim.

Regarding claim 17, Nishimura and Nakagiri fail to teach a display brightness control means. Kim teaches a display brightness control means for controlling the display means so that the display segment selected by the manipulation means has a display brightness higher than that of the other display segments displayed by the display means in column 2 lines 55-56 and 62-65, where it is described that the luminance or brightness of the display is controlled where data lines of the display are selectively displayed brighter than the other displayed segments as illustrated in Figure 13. It would have been obvious to one of ordinary skill in the art at the time

of invention to combine the teachings of Nishimura, Nakagiri and Kim because this combination would provide the selective manipulation of display segments in which one segment would be brighter than the other segments thereby conserving energy.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura in view of Nakagiri in further view of Murakami (US Patent 4,472,066).

Regarding claim 19, Nishimura fails to teach the limitations. Nakagiri teaches a selection control means for selectively changing one of the display segments as a first display segment having a first predetermined size, as described in lines 1-13 of the abstract, and another of the display segments as a second display segment having a second predetermined size smaller than the first predetermined size, as described in column 5 lines 25-30, where it is described that display segments may be individually selected and the size of each of those segments are modified, as described in column 12 lines 57-60, column 1 lines 64-67 and column 2 lines 1-2, therefore a second segment could be modified to a smaller size. Nakagiri also illustrates a display means to display the display segment selected as the first display segment and a display means to display the second display segment as one of the display segments other than the display segment selected by the manipulation means, in Figures 15 and 16 respectively.

However, Nishimura and Nakagiri fail to teach a time counting means for counting an elapsed time period, wherein when the time counting means has counted a predetermined elapsed time period, the font size of the display segment is decreased. Murakami teaches a time counting means for counting an elapsed time period, wherein when the time counting means has counted a predetermined elapsed time period, the font size of the display segment is changed in column 17

Art Unit: 2628

lines 51-52 and in column 18 lines 44-47, during a time correction mode, as shown in Figure 4, therefore one of ordinary skill in the art would have been capable of providing the font size of the display segment to be changed to a smaller size. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Nishimura, Nakagiri and Murakami because this combination would provide conservation of energy used to continually display larger display elements on a display by decreasing the size of the display segment after particular time period has been counted.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura in view of Nakagiri, in further view of Murakami and in further view of Kim.

Regarding claim 20, Nishimura and Nakagiri fail to teach the limitations. Murakami teaches controlling the display to cause the display segment selected by a manipulation means to blink in column 21 lines 32-35. However, Nishimura, Nakagiri and Murakami fail to teach that during an elapsed time period, the display is controlled to decrease a lit time ratio of the selected display segment. Kim teaches that during an elapsed time period, as described in column 2 lines 49-50 and column 6 lines 38-39, that the display brightness control means controls the display means to decrease a lit time ratio of the selected display segment, as described in column 3 lines 1-9. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Nishimura, Nakagiri, Murakami and Kim because this combination would provide selective display segment that blink and decrease in brightness over an elapsed time period, thereby conserving energy.

Response to Arguments


Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Said Broome whose telephone number is (571)272-2931. The examiner can normally be reached on 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on (571)272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S. Broome
3/12/07 


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SUPERVISORY PATENT EXAMINER